

IN THE CLAIMS:

The text of all pending claims, 1-27 is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 9, 11, 15, 16, and 20-27 without prejudice or disclaimer, and AMEND claims 1, 2, 10, 17, and 19 in accordance with the following:

1. (Currently Amended) An audio power amplifying apparatus including first through B-th power amplifying terminals, each of which power-amplifies an input alternating current (AC) audio input signal and outputs a power amplified result as an audio output signal, wherein a b-th amplifying terminal ($1 \leq b \leq B$) comprises:

a preamplifier that divides the audio input signal into positive and negative portions, preamplifies the positive and negative portions, and outputs the preamplified positive and negative portions;

a power supply to supply ~~first through M-th~~ positive and negative voltages having different levels;

a power amplifier that selects one of the ~~first through M-th~~ positive supply voltages having a level proportional to a level of the preamplified positive portion and one of the ~~first through M-th~~ negative supply voltages having a level proportional to the level of the preamplified negative portion, amplifies the preamplified positive and negative portions using the selected one of the positive and negative supply voltages, respectively, and outputs the amplified positive and negative portions; and

a signal synthesizer that combines the amplified positive and negative portions output from the power amplifier and outputs the combined result as the audio output signal,

wherein said amplifier comprises current amplifiers, each of which is connected to a corresponding one of the positive and negative supply voltages,

the preamplified positive portion is amplified using one of the current amplifiers that is connected to the one of the positive supply voltages that is proportional to the preamplified positive portion, and

the preamplified negative portion is amplified using another one of the current amplifiers that is connected to the one of the negative supply voltages that is proportional to the preamplified negative portion.

2. (Currently Amended) The apparatus of claim 1, wherein:

said power amplifier comprises:

first through M-th current amplifiers that are connected in series to each other and which are supplied with the first through M-th positive voltages, respectively,

M+1-th through 2M-th current amplifiers that are connected in series to each other and which are supplied with the first through M-th negative voltages, respectively; and,

first through 2M-th resistors that are connected in series with each other between the preamplified positive and negative portions,

the m-th current amplifier is biased in response to a voltage at a first node between the m-1-th resistor and the m-th resistor to amplify a current output from the m-1-th current amplifier and to output the amplified current to the m+1-th current amplifier, where $2 \leq m \leq M-1$,

the M+m current amplifier is biased in response to a voltage at a second node between the M+m-1-th resistor and the M+m-th resistor to amplify a current output from the M+m-1 current amplifier and to output the amplified current to the M+m+1-th current amplifier,

the first current amplifier is biased in response to a voltage at a third node between the first resistor and the preamplified positive portion,

the M+1-th current amplifier is biased in response to a voltage at a fourth node between the M+1-th resistor and the preamplified negative portion,

the M-th current amplifier is biased in response to a voltage at a fifth node between the M-1-th resistor and the M-th resistor to amplify a current output from the M-1-th current amplifier and to output the amplified current to the signal synthesizer as the amplified positive portion, and

the 2M-th current amplifier is biased in response to a voltage at a sixth node between the 2M-1-th resistor and the 2M-th resistor to amplify a current output from the 2M-1-th current amplifier and to output the amplified current to the signal synthesizer as the amplified negative portion.

3. (Original) The apparatus of claim 2, wherein each of the first through 2M-th current amplifiers comprises:

a first transistor having an emitter, a base connected to a bias input port, and a collector connected to a corresponding one of the positive and negative voltages,

a 2M+1-th resistor, one side of which is connected to the emitter of the first transistor, and

a second transistor having a base which is connected to the emitter of the first transistor, a collector connected to the collector of the first transistor and an emitter which is connected to another side of the 2M+1-th resistor.

4. (Original) The apparatus of claim 3, wherein:

said power amplifier further comprises:

a first diode having an anode and a cathode coupled to the third node and a bias input port of the first current amplifier, respectively,

a second diode having a cathode and an anode coupled to the fourth node and a bias input port of the $M+1$ -th current amplifier, respectively, and

third through $2M-2$ -th diodes, wherein the $m+1$ -th diode has an anode and a cathode coupled to the first node and a bias input port of the m -th current amplifier, respectively, and the $M+m-1$ -th diode has a cathode and an anode coupled to the second node and a bias input port of the $M+m$ current amplifier, respectively.

5. (Original) The apparatus of claim 4, wherein:

said power amplifier further comprises $2M-1$ -th through $4M-4$ -th diodes,

an x -th diode has an anode and a cathode coupled to the $x-2M+3$ -th positive voltage and output of the $x-2M+2$ -th current amplifier, respectively, where $2M-1 \leq x \leq 3M-3$, and

a y -th diode has a cathode and an anode coupled to the $y-3M+4$ -th negative voltage and output of the $y-2M+3$ -th current amplifier, respectively, where $3M-2 \leq y \leq 4M-4$.

6. (Original) The apparatus of claim 5, wherein the b -th power amplifying terminal further comprises a third transistor having a base connected between the M -th resistor and the $2M$ -th resistor, and a collector and an emitter connected between the fifth and sixth nodes.

7. (Original) The apparatus of claim 6, wherein:

said signal synthesizer comprises $2M+2$ -th and $2M+3$ -th resistors connected in series to each other between the amplified positive and negative portions output from the M -th and $2M$ -th current amplifiers, respectively, and

the audio output signal is output from between the $2M+2$ -th and $2M+3$ -th resistors.

8. (Currently Amended) The apparatus of claim 4, wherein said preamplifier changes an amplification factor in response to the audio output signal output from said signal synthesizer.

9. (Cancelled)

10. (Currently Amended) A power amplifying apparatus to amplify an input signal to be output as an amplified signal, comprising:

a splitting unit that splits the input signal into positive and negative signal portions;

a power supply to supply voltages;

an amplifier to match ones of the signal portions with corresponding ones of the supply voltages and to amplify the signal portions using the corresponding supply voltages; and

a signal synthesizer to receive the amplified signal portions and to combine the amplified signal portions as the amplified signal,

wherein said power supply supplies positive and negative supply voltages of different values,

said amplifier amplifies the positive signal portion using one of the positive supply voltages that is proportional to the positive signal portion, and amplifies the negative signal portion using one of the negative supply voltages that is proportional to the negative signal portion,

said amplifier further comprises current amplifiers, each of which is connected to a corresponding one of the positive and negative supply voltages,

the positive signal portion is amplified using one of the current amplifiers that is connected to the one of the positive supply voltages that is proportional to the positive signal portion, and

the negative signal portion is amplified using another one of the current amplifiers that is connected to the one of the negative supply voltages that is proportional to the negative signal portion.

11. (Cancelled)

12. (Original) The power amplifying apparatus of claim 10, wherein said amplifier matches the ones of the supply voltages that are proportional to the corresponding ones of the signal portions.

13. (Original) The power amplifying apparatus of claim 10, wherein said splitting unit further amplifies the input signal.

14. (Original) The power amplifying apparatus of claim 13, wherein said splitting unit amplifies the input signal in accordance with the amplified signal output from said signal synthesizer.

15. (Cancelled)

16. (Cancelled)

17. (Currently Amended) The power amplifying apparatus of claim ~~46~~10, wherein the remaining ones of the current amplifiers do not amplify the positive and negative signal portions.

18. (Original) The power amplifying apparatus of claim 17, wherein the current amplifiers are connected in series with each other and each of the current amplifiers is a circuit in a Darlington configuration.

19. (Currently Amended) A power amplifying apparatus to amplify an input signal to be output as amplified signals to different devices, comprising:

an input terminal to receive the input signal; and

power amplifying terminals to receive the input signal from said input terminal and to output amplified signals to the different devices,

wherein each said power amplifying terminal comprises

a splitting unit that splits the input signal into positive and negative signal portions,

a power supply to positive and negative supply voltages of different values,

an amplifier, having current amplifiers, each of which is connected to a corresponding one of the positive and negative supply voltages, to match ones of the signal portions with corresponding ones of the supply voltages and to amplify the signal portions using the corresponding supply voltagesthe positive signal portion being amplified using one of the current amplifiers that is connected to the one of the positive supply voltages that is proportional to the positive signal portion, and the negative signal portion is amplified using another one of the current amplifiers that is connected to the one of the negative supply voltages that is proportional to the negative signal portion, and

a signal synthesizer to receive the amplified signal portions and to combine the amplified signal portions as the amplified signal to be output to the corresponding one of the different devices.

20-27. (Cancelled)